

**The National School Reform Agreement: Its Implications for  
Curriculum Reform**

**Michael Watt**

**Paper presented at the conference of the Australian Curriculum Studies  
Association, Melbourne Zoo, Melbourne, Victoria, Australia, 6 and 7  
September, 2019**

Copyright (c) 2019 by Michael G. Watt

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the author. Requests for permission should be addressed in writing to the author.

Author: Michael G. Watt

Address: 316 Churchill Avenue, Sandy Bay, Tasmania 7005, Australia

Phone: 61 3 6225 1335

E-mail: [michaelgwatt@outlook.com.au](mailto:michaelgwatt@outlook.com.au)

Cataloguing in Publication Data

Watt, Michael G.

The National School Reform Agreement: Its Implications for Curriculum Reform. 1. Educational standards – Australia.

## **Abstract**

The purpose of this study was to examine policymaking that led to the National School Reform Agreement and its effects on national and state-level curriculum reforms. Content analysis method was used to reveal the philosophic positions on education held by experts appointed to conduct the national policy reviews and the opinions of education commentators. Survey method was used to elicit information from state-level policymakers and officials about their priorities and to identify key aspects of the decision-making process. The results showed that the recommendations of the national policy reports, in particular the Review to Achieve Educational Excellence in Australian Schools, influenced the attributes of the reform directions and national policy initiatives set out in the National School Reform Agreement. The influence of the Review's recommendations on emerging curriculum reforms was limited, since the mission of the National Learning Progressions and Online Formative Assessment Initiative is to develop voluntary resources to support the Australian Curriculum. Evidence that the Review's recommendations affected the reform plans set out in the bilateral agreements is scanty, since the complex decision-making process in each state and territory involving negotiations between the three education sectors as well as the curriculum, assessment and certification board ameliorated any effect. Consequently, there is no evidence that the Review's recommendations influenced current state-level curriculum reforms with the possible exception of the New South Wales Curriculum Review. The findings of the study showed that the influence of the national policy reports was confined to the national level with limited impact on national and state-level curriculum reforms.

## **Biographical Note**

Michael Watt taught in several secondary schools in Tasmania, and worked as an education officer in the Tasmania Department of Education. He holds masters' degrees in educational studies and education from the University of Tasmania, and a doctorate in education from the University of Canberra. He currently works as an education consultant.

## Preface

As part of an initiative to improve the development, selection and use of high quality materials aligned to the Australian Curriculum, I reviewed the National School Reform Agreement with particular reference to the state and territory bilateral agreements to identify curriculum-related initiatives being undertaken between 2019 and 2023. Conducted early in 2019, the review focused on determining whether an entity established to evaluate textbooks, digital materials and open educational resources could support the curriculum-related initiatives set out in the bilateral agreements as well as existing initiatives undertaken by states and territories to implement the Australian Curriculum.

In 2018, I published a report, *A Comparison of the Change Process in States' and Territories' Implementation of the Australian Curriculum*. A comparison of the findings of the review and the earlier report identified that important curriculum reforms, included in the earlier report, were not reflected in the bilateral agreements of a few states and territories. These discrepancies raised queries about how decisions were made about what elements should be included in the bilateral agreements and who made these decisions. These queries provided the key objective for the present research study.

I decided that it was essential to use historical research method to uncover policymakers' rationale for creating the National School Reform Agreement. This decision led to reviews of the three key national policy reports, which were undertaken to provide an in-depth understanding of the nature of the systemic reform envisaged by policymakers. Furthermore, I decided to survey state-level policymakers to elicit information that would illuminate the decision-making process involved in selecting state-specific reforms included in the bilateral agreements. The demands of such a task led to assistance and advice being offered by a range of people engaged in this field of activity.

I would like to thank the following people for responding to the survey. Coralie McAllister, Executive Branch Manager Strategic Policy in the ACT Education Directorate offered advice about the decision-making process undertaken in the Australian Capital Territory and reviewed the draft profile. Luke Clarke, Director, National Funding, External Relations Policy in the New South Wales Department of Education provided information about the decision-making process undertaken in New South Wales. Edwina Spanos, Acting Senior Director Strategic Policy in the Northern Territory Department of Education provided information about the decision-making process undertaken in the Northern Territory. The Hon. John Gardner MP, Minister for Education, provided information about the decision-making process undertaken in South Australia. The Hon. Jeremy Rockliff MP, Minister for Education and Training, provided information about the decision-making process undertaken in Tasmania. The Hon. James Merlino MP, Minister for Education, provided information about issues relating to the delay in Victoria signing a bilateral agreement. Lisa Rodgers, Director General in the Western Australia Department of Education provided information about the decision-making process undertaken in Western Australia. Juanita Healy, Executive Director,

School Curriculum and Standards in the Western Australia Department of Education reviewed the draft profile. The Australian Government Department of Education provided a description of the decision-making process that the Australian Government Department of Education engaged in with state and territory education agencies to create the bilateral agreements.

## Introduction

In April 2010, Julia Gillard, the Minister for Education, initiated a review to develop a funding system for schools, which is transparent, fair, financially sustainable and effective in promoting excellent outcomes for students. A six-member panel conducted a listening tour, produced an issues paper, invited public submissions, undertook school visits, and commissioned four research reports, which involved a separate submission process. In the report of the review, published by the Australian Government Department of Education, Employment and Workplace Relations (2011), the panel made 41 recommendations, but a needs-based approach to funding was the central concept that provided a Schooling Resource Standard with a base amount per student and additional loadings for five types of disadvantage: small and remote schools; low socioeconomic students; Indigenous students; students with disabilities; and students with low English language proficiency.

In June 2013, the Australian Parliament enacted the Australian Education Act 2013 setting out the rights and responsibilities of approved authorities for schools, block grant authorities and non-government representative bodies to receive federal funding for schools. The Australian Education Act 2013 commenced in January 2014, but it was amended in June 2017 to give effect to the Quality Schools package intended to link federal, state and territory funding of education to the improvement of student outcomes. With changes to funding arrangements commencing in January 2018, the amended Australian Education Act 2013 will lead the Australian Government to increase funding for public schools to 20 percent by 2023 and non-government schools to 80 percent by 2023, all schools will move to consistent shares of the Schooling Resource Standard within ten years, and state and territory governments will increase their share to public schools to at least 95 percent of the Schooling Resource Standard by 2023.

In November 2017, the Australian Government appointed the National School Resourcing Board, consisting of eight education, finance and demography experts, to review elements of the needs-based funding model. At its second meeting in November 2017, the board initiated a review of the socioeconomic status score methodology and recommended options for alternative capacity to contribute measures to address stakeholder concerns about the appropriateness of the current methodology. Supported by a research team of data analysts, the Board commissioned a panel of experts to conduct three research studies and released an issues paper in December 2017 inviting stakeholders to submit responses by February 2018. The Board received 34 substantive submissions and 261 submissions from an online survey. The Board consulted stakeholders from each state and territory and met with 38 organisations and individuals identified through the public submission process. The analysis of feedback from the submissions and the consultations with stakeholders showed most respondents supported continuing with the current measure, but other respondents indicated concerns with the current measure and proposed alternative options. The research team of data analysts found that the use of area-based data under the current methodology misidentified some schools. The National School

Resourcing Board (2018) reported that a direct measure of parental income, now possible due to innovative developments in governmental data linkages, would be the most accurate measure. However, additional analysis and consultation will be required to determine the appropriate settings for this measure.

The debate over a funding model for schools that led to the adoption of a needs-based approach was influenced by arguments that school funding should be targeted towards the most effective strategies to raise student achievement. The effects of global economic competition, declining student performances in international studies of educational achievement and achievement gaps between socioeconomic and ethnic groups were important factors shaping the debate among policymakers about how funding should be spent more effectively and what are the most effective instructional strategies to raise student outcomes. Since 2000, there has been a marked decline in Australian students' performances in reading literacy, mathematics and science measured on the Programme for International Student Assessment tests. Similarly, there has been no significant improvement or a decline in years 4 and 8 mathematics and science measured on the Trends in International Mathematics and Science Study between 1995 and 2015. Furthermore, the decline in student performance is broad-based occurring across all socioeconomic groups with larger declines in high socioeconomic groups. The decline in student performances has implications for future workers being equipped for workplaces being reshaped by new technologies and competition posed by workers educated in high-performing education systems.

An objective of this study is to examine policymaking that led to the creation of the National School Reform Agreement. Leading up to the federal election in September 2013, the Liberal and National Parties released *The Coalition's Policy for Schools: Students First*. A principle of this policy to establish a robust national curriculum centred on an action to restore the focus on science, technology, engineering and mathematics. In October 2014, the Australian Government funded the Mathematics by Inquiry project, the Coding across the Curriculum program, adapting and piloting the Pathway in Technology Early College High School (P-TECH) model developed by IBM in New York City, and summer schools for high-achieving students. Funding of these initiatives was instrumental in the Education Council's decision to develop a strategy to increase student participation in science, technology, engineering and mathematics education. In June 2016, the Australian Government announced the Regional Student Access to Education package aimed at reducing the period that regional and remote students need to be employed under Youth Allowance and ABSTUDY living allowance from 18 months to 14 months, creating 1,200 new rural and regional enterprise scholarships for students in higher education to undertake science, technology, engineering and mathematics studies, and a 50 percent increase in assistance for the Isolated Children's Additional Boarding Allowance. These measures were supported by an announcement that an independent and comprehensive review would be conducted into the equity of access to education for regional, rural and remote students. Evidence provided by the

Organisation for Economic Cooperation and Development that increasing funding for schools does not improve student outcomes is borne out by the finding that total funding for schools provided by Australian governments has doubled since 1988, but students' performances have fallen on international and national studies of educational achievement. This conclusion was central to the Australian Government's decision to establish the Review to Achieve Educational Excellence in Australian Schools.

The purpose of this study was to analyse decision-making by policymakers, education experts and officials in shaping emerging curriculum reforms arising from the recommendations of the national policy reports and set out in bilateral agreements that states and territories signed with the Australian Government. Reviews of the Australian Government's initiatives relating to science, technology, engineering and mathematics, regional, rural and remote education, and educational excellence provided the basis for an evaluation of consequential national and state-specific curriculum reforms. Based on the assumptions and objectives of this review, the study focused on four research questions. What were the responses of education commentators reported in educational literature to the recommendations presented in the national policy reports? Did the priorities of policymakers, education experts or officials influence selection of reform actions included in the bilateral agreements? Did the decision-making process lead to specific reform actions included in the bilateral agreements that show close alignment to existing state-level curriculum reforms? Did the recommendations presented in the national policy reports influence emerging curriculum reforms at the national and state levels?

## **Methodology**

The research design comprised a review of national policy reports and educational literature with the intention of uncovering information to answer the research questions. The review of documents was supplemented by a survey of state-level policymakers to elicit information about their priorities for selecting reform actions included in the bilateral agreements. This design allowed the researcher to cover each of the four research questions comprehensively through a literature and policy review.

The procedures for collecting information for the study involved following a sequence of steps. Initially, reports referring to the Australian Government's initiatives relating to science, technology, engineering and mathematics, regional, rural and remote education, and educational excellence were identified by searching the Education Council's and the Australian Government Department of Education's websites. The Australian Education Index and the Educational Resources Information Center's website were searched to identify educational literature relevant to these reviews. Information obtained from four citations, identified from these searches, covered opinion papers and journal articles. Also, policy documents identified on the websites of state and territory education agencies provided a valuable source of information for state-level curriculum reforms.



A survey of state-level policymakers was conducted to elicit information that could illuminate the decision-making process involved in selecting reform actions included in the bilateral agreements. A pro forma letter, outlining a request for this information, was sent to state and territory ministers for education in mid-June 2019. Responses were received from ministers for education or education officials for the Australian Capital Territory, New South Wales, Northern Territory, South Australia, Tasmania and Western Australia. Information contained in this correspondence varied greatly in value for enlightening aspects of the decision-making process, but further contact with three state education officials provided additional information that clarified important aspects. One state official provided contact details for the Australian Government Department of Education's official responsible for negotiating the bilateral agreements with the states and territories. This person was able to clarify other aspects of the decision-making process. An inquiry lodged with Victoria's Minister for Education in February 2019 seeking clarification for that state's delay in signing a bilateral agreement brought forth a response that specified the circumstances for this delay.

The procedure for analysing information, collected during the study, used content analysis method to summarise the subject matter focusing on interpretation of the relevant policy reports, educational literature and correspondence. An additional step in using content analysis method was applied to answer the third research question. The subject matter referring to actions for supporting students, student learning and student achievement, reported in the bilateral reform plans for each state and territory, was compared with the profiles for each state and territory previously reported by Watt (2018). This comparison formed the basis for judging alignment between existing and proposed state-level curriculum reforms. The documents were read and summaries prepared. Reporting the results involved organising the summaries chronologically, and incorporating them into the appropriate section of the paper.

### **National Strategy in Science, Technology, Engineering and Mathematics**

At the meeting of the Education Council held at Brisbane in May 2015, the ministers agreed to collaborate on developing a strategy to increase student participation in science, technology, engineering and mathematics. In November 2015, Adrian Piccoli, the New South Wales Minister for Education, convened a STEM Education Summit in Sydney to discuss key issues to inform development of the strategy. The first of two sessions at the Summit examined types of skills students need for workplaces in the future. In the second session, discussions among the participants focused on increasing student participation and diversity in science, technology, engineering and mathematics. Key themes emerging in discussions focused on underrepresentation of female and indigenous students, an overcrowded curriculum made it difficult for teachers to provide deeper engagement, the importance of coding and the Australian Curriculum for Technologies, the need to attract more qualified teachers, the role of universities in supporting

better outcomes in schools, and better coordination of partnerships between schools, industry and universities. Following the Summit, over 40 percent of the participants submitted further ideas online and suggested areas for change.

In December, the Education Council (2015) adopted the *National STEM School Education Strategy: a Comprehensive Plan for Science, Technology, Engineering and Mathematics Education in Australia*, setting out goals to ensure all students finish school with strong foundational knowledge in science, technology, engineering and mathematics, and are inspired to take on more challenging science, technology, engineering and mathematics subjects. The two goals for the national strategy are supported by five areas of national action. Student ability, engagement, participation and aspiration in science, technology, engineering and mathematics should be increased by exploring options for a minimal level of numeracy attainment and increasing the recognition of the subject load of advanced subjects. Teacher capacity and teaching quality in science, technology, engineering and mathematics should be increased by collecting and developing online exemplar teaching modules, establishing a professional learning exchange, lifting the quality of initial teacher education, and working with universities to improve the pathway for graduates into teaching. Education opportunities for science, technology, engineering and mathematics within school systems should be supported by extending the national literacy and numeracy continuums, developing online formative assessment tools, and revising the scope and extending the reach of the national science and information, communication and technology assessments. Effective partnerships with universities, business and industry should be facilitated by establishing a STEM Partnership Forum. A strong evidence base for science, technology, engineering and mathematics should be built by national reports charting changes in data indicators, and sharing and synthesising research and evaluation.

In 2017, the Education Council established the STEM Partnership Forum as a national collaborative action to facilitate a more strategic approach to school-based partnerships with industry. Consisting of 17 industry executives and education officials, the Forum released an issues paper, held 18 meetings with experts from education and industry across the capital cities in the states and territories, and collected 53 written submissions.

In the report, published by the Education Council (2018), the STEM Partnership Forum examined national and international trends in science, technology, engineering and mathematics education, teacher professional learning, and factors affecting student engagement. Two main findings were identified from the examination of national and international trends. Girls, students from low socioeconomic backgrounds, Aboriginal and Torres Strait Islander students, and students from rural, regional and remote areas are underrepresented in science, technology, engineering and mathematics courses and overrepresented as low performers in international studies of educational achievement. A comparative study of science, technology, engineering and mathematics providers, conducted by the Australian Council of Learned Academics, showed that high-performing countries are adopting

innovative approaches to improve science, technology, engineering and mathematics outcomes. While teachers are central to the effort in improving student engagement in science, technology, engineering and mathematics education, there is no national requirement for teachers in particular subjects to undertake specified hours of professional learning in discipline-specific content delivered by an accredited provider. The importance of high-quality discipline-specific professional learning can be met by supporting school leaders to act as instructional leaders, forming industry-school partnerships, providing targeted support for teachers facing challenging circumstances, and offering industry placements for teachers in vocational education and training. Engaging students in science, technology, engineering and mathematics education involves discussing with them the real world problems they want to solve rather than focusing on careers in science, technology, engineering and mathematics. These efforts should acknowledge the important roles of parents, teachers and career advisors in influencing student decision-making. There is a broad range of initiatives sponsored by government and industry available to improve career education. School-industry partnerships and vocational education and training provide the best means for increasing student participation in science, technology, engineering and mathematics education.

An analysis of large scale school-industry partnerships, such as the Pathway in Technology Early College High School (P-TECH) model, shows that they share five common features: scalability and sustainability; intermediate and agreed points of contact for industry; integrated teacher professional learning; real world context; and alignment to the Australian Curriculum. The key challenge of commencing school-industry partnerships can be managed by using a planning strategy that provides an intermediary organisation. An intermediary organisation can work with both parties to clarify the objectives of the partnership, design initial activities and support implementation. There are many science, technology, engineering and mathematics initiatives being conducted for school students, but there is no national framework for their evaluation and sharing information about outcomes. A national science, technology, engineering and mathematics education resources toolkit that provides access to resources and guidance, showcases high quality partnerships, identifies intermediaries, evaluates outcomes and impact of partnerships, provides guidance for engaging underrepresented groups and leverages existing platforms should be designed under the auspices of the Education Council. An evidence base providing this information needs to be created that integrates datasets from various sources and incorporates a unique student identifier for sharing data across state borders. Privacy, access and control issues need to be addressed in developing and implementing the unique student identifier. An indicative dashboard, designed to support accelerated implementation of this recommendation, requires further work to ensure measures included in the dashboard are robust and maintained regularly. The report concluded with the corollary that its ten recommendations can be implemented in the short to medium term, and that they will have a genuine impact on the quality of activity around school and industry partnerships.

The recommendation by the STEM Partnership Forum for the Education Council to establish a National Education STEM Resources Toolkit led the Australian Government Department of Education and Training to commission Dandolo Partners, a management consultancy firm based in Melbourne, to develop the toolkit. This initiative led the Education Council to conduct a study related to the national collaborative action set out in the national strategy in science, technology, engineering and mathematics to synthesise research and evaluation findings, and share information about science, technology, engineering and mathematics initiatives. The Australian Government Department of Education and Training commissioned Education Services Australia to collect information from state and territory education agencies about science, technology, engineering and mathematics initiatives that focused on those that had planned or completed evaluations.

In the report on this study, the Education Council (2019) presented an overview of science, technology, engineering and mathematics education in Australian schools and a synthesis of the findings of available evaluations of science, technology, engineering and mathematics initiatives. Multiple sources of funding for science, technology, engineering and mathematics initiatives in schools include federal, state and territory governments, industries, universities and professional representative bodies. Of the 69 science, technology, engineering and mathematics initiatives funded by governments, which were identified by the survey, 12 were national, one involved New South Wales, South Australia and Western Australia, 11 occurred in the Australian Capital Territory, eight in New South Wales, three in the Northern Territory, 14 in Queensland, four in South Australia, six in Tasmania, four in Victoria and six in Western Australia. The science, technology, engineering and mathematics initiatives vary in type, target, goal and scale. They were classified as targeted at teachers or students, families and communities. The former type of science, technology, engineering and mathematics initiatives consisted of five categories: teacher professional learning; instructional materials; appointing mentor schools; industry-school partnerships; and scholarships. The latter type of science, technology, engineering and mathematics initiatives consisted of seven categories: instructional materials; extension programs for gifted students; extra-curricular learning and engagement programs; grants for students and school projects; camps; scholarships; science fairs and competitions. Evaluations have been conducted for 16 science, technology, engineering and mathematics initiatives.

### **Independent Review into Regional, Rural and Remote Education**

In March 2017, the Australian Government commissioned Emeritus Professor John Halsey of Flinders University, South Australia, to conduct a review to examine challenges faced by school students in regional, rural and remote areas and to recommend innovative solutions to help these students succeed at school and beyond. Professor Halsey was assisted by a secretariat team from the Australian Government Department of Education and Training. The review commenced with a literature review, which focused on relevant peer-

reviewed articles, reports and grey literature published mainly in Australia, USA and Canada since 2006. A discussion paper, based on the literature review, outlined nine themes: curriculum and assessment; teachers and teaching; leaders and leadership; school and community; information and communications technology; entrepreneurship and schools; improving access (enrolments, clusters, distance education, boarding); diversity; and transitioning beyond school. The discussion paper was disseminated widely to organisations and individuals to assist in making submissions to the review. Government agencies, universities, education systems, professional associations, philanthropic organisations and members of the public lodged 340 submissions. In addition, 21 public meetings were held in New South Wales, Northern Territory, Queensland, South Australia, Tasmania, Victoria and Western Australia, and 71 meetings were held with stakeholders in all states and territories. During the consultation, the issue arose of access to affordable accommodation for regional, rural and remote students relocating to pursue higher education. The Australian Government Department of Education and Training commissioned Urbis, a public policy evaluation and consultancy firm based in Melbourne, to assess the supply of and demand for purpose-built student accommodation for regional, rural and remote students. Urbis (2018) found that 50 percent of regional, rural and remote students relocated to study at university, they experienced a range of challenges in relation to accommodation and an increasing number were choosing to study online.

Halsey (2018) examined factors affecting regional, rural and remote education. The review identified that student achievement, challenges for education, and provocations that impact on students' learning and opportunities were key factors. A correlation between decreasing achievement and increasing remoteness was identified in data from national and international studies of educational achievement and successful completion of year 12, higher education or vocational education and training. An overview of research findings about what impacts on regional, rural and remote students in relation to each theme is discussed as a prelude to the consideration of four provocations: global population, resources and environment; cost of inaction; challenges associated with cultural diversity, distance and population distribution; and globalisation, digitisation and automation. The findings of the review in relation to regional, rural and remote students were presented for each theme followed by a recommendation and associated actions, which should improve capacity to bridge the gap in achievement of students in regional, rural and remote areas. In relation to curriculum and assessment, the findings indicated the need for greater flexibility to adapt the Australian Curriculum, greater representation of traditional Aboriginal culture in the curriculum presented to Aboriginal students, greater participation of stakeholders in developing curriculum and assessments, greater focus on place-based or project-based approaches, administrative overload affecting small schools, and greater participation of teachers in assessing students in years 11 and 12. In relation to teachers and teaching, the findings showed that the quality of teaching arising from difficulty in attracting and retaining teachers needs to be addressed through five main actions: using appropriate selection criteria; modifying preservice training;

improving the transfer process; increasing teacher experience and expertise; and reducing teacher turnover. In relation to leaders and leadership, the findings identified that preparation, induction and on-going support of principals in regional, rural and remote communities needs to be improved by offering a postgraduate qualification, managing administrative and accountability workloads of principals in small schools through clustering arrangements, and options for schooling needs to be expanded by establishing partnerships. In relation to schools and communities, the findings emphasised the role of the school as central to community life, improvement in the timeliness of services to support students with specific learning needs, greater involvement of universities and technical and further education, provision of vocational education and training in schools, and diversification of the university pathway choices for improving post-school opportunities. In relation to transitions, the findings indicated that the transitioning process could be improved by increasing career information and advice, improving the quality and affordability of accommodation, overcoming delays caused by the need to meet criteria for the Youth Allowance and government assistance for travel. In relation to philanthropy, the findings showed that philanthropic organisations can be involved more widely in providing flexible funding to schools. In relation to entrepreneurship, the findings indicated that strong linkages between schools, business, industry, community and higher education can foster entrepreneurship to develop and leverage opportunities and sustain existing enterprises, and use of more flexible approaches to curriculum and instruction could encourage entrepreneurship in schools. In relation to information and communications technology, the findings identified that inadequate provision of information and communications technology in many localities leads to reliance on distance education, but innovative use of information and communications technology is stimulating innovation and diversity in a few localities. In relation to improving access, the findings showed that distance education has fostered a valuable range of services, but it is dependent on the performance of technology, clustering of schools' services is an important way to improve access to education, the allocation of funds to schools enrolling Aboriginal students need to be appropriate, and the movement of students away from local communities and the financial and social issues arising from boarding can be overcome by a range of supports to improve educational outcomes.

Based on the findings relating to each theme, Halsey concluded that building capacity in regional, rural and remote communities requires collaborative efforts by governments, the private sector and regional bodies, and strategies to develop and implement a long-term plan for regional, rural and remote education. A taskforce needs to be appointed to drive, monitor, evaluate and report on outcomes and progress. Sustainable change in regional, rural and remote education requires building capacity of two types: gaining an understanding of what outcomes existing resource allocations and how they can be improved; and learning how best to drive regional economic growth by recognising the role of educational training providers. In conclusion, Halsey stated that the report's 11 recommendations and actions need to be implemented in the shortest time possible to bridge the lagging achievement of regional, rural and remote students.

Following presentation of the report in January 2018, the Australian Government referred it to the Review to Achieve Educational Excellence in Australian Schools, which took six recommendations into account in developing its priorities and recommendations. In April 2018, the report was presented to the Council of Australian Governments and referred to the Education Council. In May 2018, the Australian Government released a response adopting the 11 recommendations and outlining initiatives to establish a national focus for regional, rural and remote education, enhance leadership, teaching, curriculum and assessment, improve information and communications technology, and enhance transitions into and out of school.

In November 2018, the Australian Government funded five regional universities to provide greater access for regional and remote students, expanded the number of rural and regional enterprise scholarships by another 1,955, funded 16 community-owned organisations to establish regional study hubs at 23 sites across regional Australia, and initiated development of a national regional, rural and remote education strategy. A four-member Regional Education Expert Advisory Group was appointed to engage with stakeholders to develop a deeper understanding of issues and challenges facing regional, rural and remote communities. In December 2018, the Regional Education Expert Advisory Group released a framing paper to highlight areas to focus on and draw out practical policy suggestions. Based on consultations and submissions, the Regional Education Expert Advisory Group developed six issues papers outlining possible actions to address challenges facing education in regional, rural and remote areas. In its final report, the Regional Education Expert Advisory Group (2019) presented a national strategy based on six recommendations: improve access to tertiary study options; improve access to financial support; improve the quality and range of student support services; build aspiration, improve career advice and strengthen schools; improve participation and outcomes for students from disadvantaged groups; and strengthen the role of tertiary education providers. A commissioner for regional, rural and remote education should be appointed to coordinate efforts to improve access to tertiary education. To support monitoring of the strategy, further work is needed to improve the capacity of the geographical classification system used by the Australian Bureau of Statistics to measure rurality and remoteness at a finer level.

## **Review to Achieve Educational Excellence in Australian Schools**

In July 2017, the Australian Government appointed an eight-member panel to conduct the Review to Achieve Educational Excellence in Australian Schools by examining evidence and making recommendations on how school funding should be used to improve school performance and student outcomes. The Review Panel was assisted by a secretariat team from the Australian Government Department of Education and Training. In September 2017, the Review Panel released an issues paper setting out five themes for the review: what students learn and how they learn; teachers and school leadership; parent and community engagement; determining and measuring success in

education; and identifying, sharing and driving good practice and continuous improvement. At the same time, a six-week public review led to 279 submissions being lodged by state and territory governments, education organisations, professional associations, academics, teachers, parents, students and community groups. The Review Panel consulted ministers for education, representatives of departments of education and professional associations, and education experts. In November 2017, the Review Panel commissioned the University of Melbourne to research the development and implementation of research and evidence entities. In the report, Clinton, Aston and Quach (2018) concluded from the research evidence that such an entity would need to be independent and principle-based to ensure evidence is used to inform practice, and undertake four functions based on an evidence-into-action model.

In the report, published by the Australian Government Department of Education and Training (2018), the Review Panel proposed a strategy for achieving educational excellence in Australian schools to overcome declining student academic performance since 2000. The Review Panel identified two key factors causing the decline. First, learning gaps between children entering early childhood education are not being addressed early. Second, many schools are cruising by maintaining average achievement from year to year, but not improving student achievement. The Review Panel identified three priorities essential for Australia to regain its former position as a world-leading education system. First, deliver at least one year's growth in learning for every student every year. Second, equip every student to be a creative, connected and engaged learner in a rapidly changing world. Third, cultivate an adaptive, innovative and continuously improving education system. Five focus areas for improvement were discussed in detail to support the three priorities.

The first focus area, laying the foundations for learning, can be met by narrowing the gaps between children entering school through three actions. First, high-quality early childhood education can make a significant contribution to student outcomes later in school. Second, early childhood education providers and schools can better support parents and carers engage in their children's learning through the development and dissemination of evidence-based tools and resources. Third, educators can ensure that students have opportunities to be partners in their own learning.

The second focus area, equipping every student to grow and succeed in a changing world, can be met by changing education policies and practices to modify the education system through four actions. First, the curriculum, assessment and reporting system needs modification by revising the structure of the Australian Curriculum and introducing assessment and reporting arrangements focusing on both learning attainment and gains. Revision of the Australian Curriculum over the next five years should focus on presenting the learning areas and general capabilities as learning progressions. Implementation of learning progressions for literacy and numeracy should be prioritised in curriculum delivery during the early years of schooling. Second, the general capabilities need to be more effectively translated from the



Australian Curriculum into classroom practice, so students acquire knowledge, skills and capabilities to succeed in a rapidly changing world of work. Third, schools need to offer broader experiences and support through community engagement, industry collaborations, youth mentoring programs, volunteering, extra-curricular activities to foster connected, engaged and creative learners. Fourth, the significant increase in the number of students participating at the senior secondary level, the privileged position of university pathways, the lack of application of the general capabilities, limitations of assessment techniques and outdated career education are issues that warrant a national review of senior secondary education. This review should focus on the nature of senior secondary education for employment needs, and the assessment and reporting of student performance.

The third focus area, creating, supporting and valuing a profession of expert educators, can be met by supporting teachers' professional practices through eight actions. First, conditions and culture need to be created to enable more collaboration between teachers through professional learning teams and communities. Second, an online formative assessment tool, calibrated against the Australian Curriculum learning progressions, should be developed and implemented to assess and monitor student progress against expected outcomes and tailor teaching practices. Third, professional learning programs need to enable support and improve teaching practice that promotes individual learning growth. Fourth, a comprehensive national workforce strategy needs to be developed to match teacher supply with workforce demands. Fifth, reform to improve the preservice training of teachers needs to be continued to produce better trained teachers. Sixth, early career teachers need to be provided with better school-based induction to assist them transition into teaching, and promote retention and professional growth. Seventh, expert teachers, recognised as highly accomplished and lead teachers accredited on the Australian Professional Standards for Teachers, need to be utilised more effectively in various roles. Eighth, greater recognition needs to be given to teachers to raise the public esteem of the teaching profession.

The fourth focus area, empowering and supporting school leaders, can be met by maximising the impact of school leaders on educational outcomes through six actions. First, the role of school leaders needs to be defined as instructional leadership by reducing administrative tasks and changing the accountability framework to one based on student outcomes. Second, the Australian Professional Standard for Principals needs to be reviewed and revised to prioritise leadership for learning growth of students. Third, policies, regulations and procedures that determine areas where school leaders have discretion for decision-making need to be sensitive to the context of individual schools, provided in areas critical to raising student achievement, and accompanied by greater accountability for achieving student learning growth. Fourth, the Australian Professional Standard for Principals needs to be amended to provide a clear pathway for aspiring principals. Fifth, new principals need to be provided with preparedness training with skills and knowledge they need for each facet of their role. Sixth, school leaders need

to be provided with a variety of professional learning opportunities appropriate to their career stages and development needs.

The fifth focus area, raising and achieving ambitions through innovation and continuous improvement, can be met by creating a cycle of continuous improvement through five actions. First, school communities need to have high aspirations for students and deliver them. Second, innovation and continuous improvement across every element of the education system, supported by data, research and evidence, need to be key drivers of ongoing change and reform. Third, existing tools used by schools for quality assurance need to be adapted to focus on accelerating student growth and supported by regular external evaluations. Fourth, a national unique student identifier needs to be introduced to collect individual student data over time. Fifth, a national research and evidence institute needs to be established to generate relevant research and evidence, synthesise evidence, manage and transfer research knowledge and accelerate the use of research knowledge.

The report concluded with a call to action. The call to action outlines how 23 recommendations, presented by the Review Panel, will enable teachers to better tailor teaching to the needs of individual schools, focus school leaders onto individual student achievement through learning growth, and strengthen parents' relationships with schools.

### **Expert Reference Panel**

Following presentation of the Review Panel's report, a three-member expert reference panel was appointed to examine the expected benefits and outcomes of the recommendations. In March 2019, Cawsey, Hattie and Masters (2019) released a concept paper presenting a vision, expected benefits and outcomes of learning progressions and online formative assessment, key considerations and principles for design and development of Australian Curriculum learning progressions, and options for their development and implementation.

The expert reference panel concluded that the vision in the Review Panel's report proposed that educators and students should have the opportunity to access current and new assessment, instructional and professional learning resources that are aligned to learning progressions and support tailored instruction. This vision is underpinned by four principles: learning is maximised when students are provided with appropriate instructional opportunities; quality evidence about where individual students are in their learning enables teachers to target their teaching effectively; a sound understanding of typical and expected trajectories of learning is a prerequisite for establishing and diagnosing where students are in their learning; and professionally designed and developed assessment resources can provide valuable assistance to teachers in assessing and monitoring student learning.

The expert reference panel outlined considerations and principles for the design of learning progressions, assessment materials and high quality

professional learning. The expert reference panel recommended that learning progressions should be developed by analysing students' performances on assigned assessment tasks and calibrating these tasks on a numerical scale based on students' success rates. The expert reference panel believed that use of the online formative assessment tool should be voluntary, provides information about the points that individual students have reached, teacher-led and easy to use, delivers immediate results, is central to instruction, better informs point-in-time judgments about student achievement, helps triangulate judgments about learning to inform reporting to students and parents, starts with reports that inform teachers and students about attainment and progress, implements assessment resources already in use and allows assessment information to follow students throughout their school years. The expert reference panel believed that professional learning for teachers and school leaders should be relevant and future-focused, offers opportunities in schools and professional networks, provides an understanding of the intents of learning progressions, provides an understanding of on-demand assessments, focuses on evidence and research about effective assessment and feedback, uses evidence-informed change management processes, enables participants to identify varied levels of support, recognises varied levels of expertise and adapts professional learning resources to need, and addresses at least one of the following areas. First, professional learning resources define requirements, and select or develop assessments. Second, professional learning resources develop understanding and the capacity to interpret reports for making valid interpretations about student learning progress. Third, professional learning resources use evidence to differentiate teaching for all learners.

The expert reference panel proposed that several streams of work should be progressed. Mapping and determining the effectiveness of learning progressions and assessment resources against the Australian Curriculum and international best practice should constitute the initial step. The next step, an integral project to develop and test a new online assessment resource or platform should involve school leaders and teachers, and be supported by market research conducted by national education organisations. Effective engagement with stakeholders would be critical to the successful implementation and adoption of these resources. An oversight group should be formed to guide the project by providing expert independent oversight.

### **National Learning Progressions and Online Formative Assessment Initiative**

In March 2019, the Education Council directed Education Services Australia, the Australian Curriculum, Assessment and Reporting Authority and the Australian Institute for Teaching and School Leadership to conduct an initial, six-month project to inform the national priority initiative to develop learning progressions and an online formative assessment tool. The initiative uses the Australian Government's Digital Transformation Agency's service design and delivery process consisting of four phases: discovery; alpha; beta; and live.

The purpose of the initial project, comprising the discovery phase, was to establish an evidence base and design specifications for resources that will support teachers in making informed decisions based on assessments, students in benefitting from feedback about their learning progress, school leaders in informing decisions about school improvement and professional development, and parents in providing clear information about their child's learning growth. Commencing in May 2019, the initial project involved gaining a deeper understanding of users' needs and developing hypotheses to solve problems. A Project Management Board was established to oversee the work of a project team led by the executive director of the New South Wales Department of Education's Centre for Education Statistics and Evaluation. A Teacher Practice Reference Group was established as the main forum for engaging with school leaders, teachers, school communities and the wider education community. Various methods including surveys, interviews, focus groups and school visits were used to collect information to gain a deeper understanding about user needs and how learning progressions and an online formative assessment tool may be implemented successfully. Activities undertaken in the initial project focused on reviewing other learning progressions in literacy and numeracy and their alignment to the National Literacy and Numeracy Learning Progressions, developing user profiles and needs analyses for school leaders, teachers, students, parents and school systems, identifying assessments schools currently use that align to the National Literacy and Numeracy Learning Progressions, and researching professional learning content and practices to support effective implementation of learning progressions and online formative assessments. At the end of the initial phase, a report presenting the findings was presented to the Education Council in December 2019. The Education Council will decide whether to extend the initiative to the next phase in 2020.

The purpose of the initiative is to create voluntary learning progressions and aligned formative assessment resources. The learning progressions will provide a resource to support implementation of the Australian Curriculum. The formative assessment resources will be integrated with existing assessments and data collection procedures. The alpha phase will test the hypotheses by building prototypes for trialling in a small number of schools. If that phase is successful, the beta phase will involve trialling a simulation of the online system in 2021, involving following teachers as they complete professional learning, gain familiarity with learning progressions, use the assessment resources, analyse reports to identify students' areas of strength and weakness, and identify instructional approaches tailored to individual students' needs.

## **National School Reform Agreement**

In April 2018, the Australian Government accepted the recommendations of the Review to Achieve Educational Excellence in Australian Schools in principle, and announced that it would work with state and territory governments, Catholic and independent education systems to determine how the recommendations should be delivered. In May 2018, David Gonski, the

chair of the Review Panel, briefed the Education Council on the review to inform development of a new national school reform agreement. In September 2018, the Education Council discussed the draft National School Reform Agreement, agreed to submit it to the Council of Australian Governments and supported work to clarify the costs, scope, milestones and governance for eight national policy initiatives. In December 2018, the Education Council agreed that the eight national policy initiatives would be developed jointly by the Australian Government and state and territory governments, and that school leaders and teachers would be consulted on implementing the reforms.

Released by the Council of Australian Governments in November 2018, the National School Reform Agreement consists of five parts. Preliminaries present a rationale statement. Parties and operation set out the participating governments, the terms of the National School Reform Agreement and bilateral agreements, and conditions for variations, withdrawal of the parties, dispute resolution, and review. Objectives, outcomes, targets and measures set out one objective, three outcomes, and three targets and measures for tracking the three outcomes. Reform activity sets out three reform directions, eight national policy initiatives, and state-specific reform initiatives. Reporting and public transparency outlines procedures for reporting and public transparency. Responsibilities specify shared responsibilities for the federal, state and territory governments, responsibilities of the federal government, and responsibilities of state and territory governments. Role of the non-government sector specifies responsibilities for Catholic and independent education sectors. Signatures list the signatories. Schedules list definitions, national policy initiatives, cost sharing principles, reporting on national policy initiatives, and bilateral reform agreements.

The National School Reform Agreement sets out three reform directions, each consisting of several national policy initiatives. The first reform direction, Supporting students, student learning and student achievement, consists of three national policy initiatives: enhancing the Australian Curriculum to support teacher assessment of student attainment and growth against clear descriptors; assisting teachers monitor individual student progress and identify student learning needs through opt-in online and on demand student learning assessment tools with links to student learning resources, prioritising early years' foundation skills; and reviewing senior secondary pathways into work, further education and training. The second reform direction, Supporting teaching, school leadership and school improvement, comprises two national policy initiatives: reviewing teacher workforce needs of the future to attract and retain the best and brightest to the teaching profession and attract teachers to areas of need; and strengthening the initial teacher education accreditation system. The third reform direction, Enhancing the national evidence base, consists of three national policy initiatives: implementing a national unique student identifier that meets national privacy requirements in order to support better understanding of student progression and improve the national evidence base; establishing an independent national evidence institute to inform teacher practice, system improvement and policy

development; and improving national data quality, consistency and collection to improve the national evidence base and inform policy development.

## **Bilateral agreements**

Each state and territory established a bilateral agreement with the Australian Government setting out state-specific reform actions. Each bilateral agreement, which is introduced by the specific reform context prevailing in the state or territory, incorporates four elements. First, reform initiatives, that the state or territory agrees to expedite to advance national reform directions in the public, Catholic and independent sectors, are listed in the bilateral reform plan. Second, any commitments, that the federal government agrees to support the state or territory to advance national reform directions, are included in the bilateral reform plan. Third, existing or new actions to raise outcomes for Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations, students with a disability and students from educationally disadvantaged backgrounds are included in the bilateral reform plan. Fourth, funding contributions of the state or territory, agreed by the federal and state or territory governments, are described under required funding contributions, measurement of contributions, and requirements for annual reporting to the federal government.

The Australian Government Department of Education and Training engaged with state and territory education agencies, Catholic and independent education sectors in defining the subject matter of the bilateral reform plans and reaching funding arrangements. The negotiations and processes used to develop the agreed lists of state or territory reforms varied from jurisdiction to jurisdiction. These negotiations generally entailed each state or territory proposing reforms that aligned with the national reform directions as a starting point for discussion with the federal government, followed by feedback and iterations of the lists of reforms until agreement was reached. The process involved federal and state or territory officials holding a series of meetings to discuss how each state's or territory's reforms supported the national reform directions, draft the bilateral agreement, and approve the final draft. Ministers for education were informed about this process and approved the draft bilateral agreements, once they were confident that important connections between state or territory reforms and national reform directions had been reached.

In New South Wales, for instance, drafting the bilateral agreement was a cooperative and collaborative process internally within the Department of Education and externally with the NSW Education Standards Authority, the Catholic and independent education sectors, the Department of Premier and Cabinet and the NSW Treasury. Decision-making, involving a large number of stakeholders, was complex and multifaceted. The reform actions included in the bilateral agreement were tested and discussed through a series of cross-sector and cross-agency forums involving senior officials, including oversight by members of the Department of Education's executive. The

bilateral agreement was referred to and approved by the Cabinet prior to the Minister for Education signing the final agreement.

In most cases, negotiations between the Australian Government Department of Education and Training and state and territory education agencies were completed over three or four months between September and December of 2018. New South Wales and South Australia signed bilateral agreements in November 2018, and the Australian Capital Territory, Northern Territory, Queensland, Tasmania and Western Australia signed bilateral agreements in December 2018. In December 2018, Victoria signed an interim bilateral agreement with the Australian Government requiring both parties to finalise a full bilateral agreement as soon as practicable in the first half of 2019. The failure of Victoria to sign a bilateral agreement within this timeframe was due to the Victorian Government's position that the federal government was entrenching funding inequality between education sectors by refusing to commit to increasing its contribution for Victoria's public schools to 25 percent of the Schooling Resource Standard. In June 2019, Victoria signed a bilateral agreement.

### ***Australian Capital Territory***

The bilateral agreement between the Australian Capital Territory and the Australian Government focuses on the Future of Education Strategy as the main element for the reform plan to support students, student learning and achievement.

In February 2017, Yvette Berry, the Minister for Education and Early Childhood Development, announced the Future of Education conversation consisting of three phases: conducting a community conversation to discuss and generate ideas; testing key themes with the community; and creating the policy direction. A small group of community partners was formed to provide advice to the Minister and the ACT Education Directorate, and a group of experts was established to facilitate the conversation with school communities. Over 4,500 responses were submitted by school communities, parents, teachers, students, community organisations and the public during the first phase held in April and May of 2017. Analysis of the feedback identified nine themes: learning for the future; transitions; individualised learning; consistency between schools; real life skills; opportunities and pathways for all; what we should be measuring and evaluating; collaboration and support to meet student needs; and valuing educators. A tenth theme, relating to inclusion, was identified during previous consultations with stakeholder groups. A literature review involved cross-referencing the responses from the consultation, and the publication of a research report. A discussion paper was released in June 2017, and an early childhood strategy discussion paper was released in November 2017. Held in March 2018, the second phase involved about 150 participants attending a three-hour workshop held at Charles Weston School in Coombs. The participants provided feedback about the four foundations, developed single policy objectives, important policy directions and short- and long-term actions for the

four foundations. A workforce discussion paper released in May 2018 led to more than 700 teachers responding to a workforce survey. The third phase to develop the policy direction involved drafting the Future of Education Strategy between April and June of 2018. The Future of Education Strategy was approved by the Legislative Assembly in August 2018, and distributed to stakeholders for discussion focusing on the development of the implementation plan for the first phase.

The Future of Education Strategy sets out four foundations, four principles for implementing the Strategy, and an implementation plan consisting of three phases: years 1 to 2; years 3 to 5; and years 5 to 10. For each phase, actions are categorised by the four foundations: students at the centre; empowered learning professionals; strong communities for learning; and systems supporting learning. Released in July 2019, the first phase implementation plan sets out planned activities, outputs, benefits and partnership opportunities for 13 actions: inclusive service delivery; safety and confidence to include; place-based inclusion; connecting young people to their learning; student agency; best start in a career of learning; thriving in a career of learning; supporting leaders in a career of learning; forging innovative partnerships; early childhood strategy; teachers as researchers; systems modelling learning; and future schools for a growing city.

The reform plan that the Education Directorate, Catholic Education Office and the Association of Independent Schools of the ACT are collaborating to support students, student learning and achievement consists of ten actions. In 2019, the three sectors are developing a cross-sectoral implementation plan to underpin the Future of Education Strategy. In 2020, the three sectors will implement the first phase of the Future of Education Strategy. In 2019, the three sectors are establishing a cross-sectoral reform forum to share information about progress and challenges. In 2019, the three sectors are delivering professional learning on the Australian Curriculum general capabilities. In 2019, the three sectors are extending the Australian Capital Territory's Australian Curriculum assessment reform effort to play a lead role in refining the learning progressions for literacy and numeracy. In 2019, the three sectors are extending the Australian Capital Territory's Australian Curriculum assessment reform effort to play a lead role in the national effort to develop the digital formative assessment proof of concept. From 2020 onwards, the three sectors will extend the Australian Capital Territory's Australian Curriculum assessment reform effort to play a lead role in developing national learning progressions in the general capabilities. From 2020 onwards, the three sectors will play a lead role in refining the digital formative assessment tool, and implement relevant aspects as they become available. In 2019, the three sectors are conducting a cross-sectoral science, technology, engineering and mathematics educators' forum. From 2019 onwards, the three sectors are implementing the Aboriginal and Torres Strait Islander histories and cultures elaborations for Science.

The Education Directorate is working on three additional actions to support students, student learning and achievement. From 2019 onwards, the Education Directorate is developing and implementing assessment and



reporting strategies aligned the Australian Curriculum achievement standards. From 2018 onwards, the Education Directorate is implementing the Cultural Integrity Continuum and Toolkit in all public schools. From 2019 onwards, the Education Directorate is expanding the number of schools to meet students' learning needs.

### ***New South Wales***

The bilateral agreement between New South Wales and the Australian Government acknowledges the context, in which the New South Wales Government embarked on a series of reforms of the education system. The reform agenda was targeted at structural changes to raise educational performance across all education sectors as well as sector-specific reforms and targeted reforms that address persistent problem areas.

In October 2011, the New South Wales Department of Education and Communities commenced a consultation process with communities and stakeholder groups to develop a strategy to improve outcomes for Aboriginal children and young people living in disadvantaged communities across the state. In May 2012, the New South Wales Government launched the Connected Communities Strategy in partnership with the Aboriginal Education Consultative Group at 15 schools selected by the Department of Education and Communities. Goodall (2015) reported in an interim evaluation that the Connected Communities Strategy had led to positive outcomes with all schools implementing local Aboriginal language programs, delivering cultural awareness training to most staff, and attempting to incorporate Aboriginal content into mainstream units of work, but challenges were experienced in some communities in using their schools as service hubs, school reference groups failed to deliver intended impacts due to lack of role clarity, and the roles of senior leaders and leaders of community engagement were not embedded due to delays in recruiting personnel.

In March 2012, Premier Barry O'Farrell and Adrian Piccoli, the Minister for Education, announced the Local Schools, Local Decisions reform intended to shift decision-making authority from the central office to schools, provide a new resource allocation model to fund schools, delegate responsibility for managing school budgets and filling staff vacancies to principals, provide salary progression based on attainment of professional standards, and provide a single school plan, annual report and budget, all linked to student learning outcomes. Griffiths, Watkins, Johnston-Anderson and Summerlin (2018) reported that schools spent funds under equity loadings of the resource allocation model to employ key staff, enhance learning support, plan and develop programs and build staff capacity, principals perceived the reform had positive effects for managing resources, staff, working locally and making decisions but not in reducing red tape, and there was no measurable impact of the reform on student outcomes.

In July 2012, the New South Wales Government initiated a conversation across the education community about policies and strategies needed to

develop and support quality teaching and learning in New South Wales schools. In March 2013, the New South Wales Government published a blueprint for action for the Great Teaching, Inspired Learning reform. Beginning in 2014, the Department of Education and Communities began implementing several initiatives set out in the blueprint for action: an integrated leadership strategy; agreements with preservice teacher education providers to ensure high quality professional experiences in schools; a performance and development framework for principals, executives and teachers; a platform for educators to manage their professional learning; and a school leadership strategy. Finn, Gould, Goodall and Watkins (2017) reported there was evidence that not all teachers were receiving beginning teachers support funding release time and mentoring allocations in full, suggesting that the policy was not being fully implemented as planned. Cox, Snowball, Rintoul and Ahn (2018) reported that the leadership credential was valuable, the leadership development initiative has enhanced the capability of both participants and mentors, and the principal school leadership initiative was valuable for experienced principals to provide advice to novice principals. Baker and Cox (2018) reported that the cadet and intern programs that employ preservice teachers on a part-time basis to gain on-the-job experience have been implemented well with most cadets and interns being employed in public schools. Hoven and Baker (2018) reported that awareness of professional experience agreements with initial teacher education providers in schools was low, hub schools have introduced successfully initiatives targeted at both preservice and supervisory teachers, and supervisory teachers are engaging increasingly in relevant professional learning, but few highly accomplished or lead teachers are involved in professional experiences for preservice teachers.

In January 2018, the Proficient Teacher Accreditation Policy, administered by the NSW Education Standards Authority, came into effect requiring conditionally and provisionally accredited teachers to complete requirements for proficient accreditation within three years for full-time teachers and five years for part-time and casual teachers.

In November 2013, the New South Wales Government announced a plan to improve student learning outcomes in rural and remote communities. The Rural and Remote Education blueprint for action allocated funds to strengthen early childhood education, broaden the range of curriculum opportunities for students, provide new incentives to attract and retain teachers and school leaders, and better support schools to meet local needs by establishing 15 specialist centres offering health and well-being services. Mazurki, Finn, Goodall and Wan (2016) reported from an evaluation of the implementation and impact of actions contained in the blueprint that implementation was progressing with some actions already achieving their objectives, although most actions were experiencing some challenges.

A review of school improvement frameworks undertaken in 2014 identified elements for the School Excellence Framework that classifies the extent to which a school is delivering, sustaining and growing, or excelling in 14 elements across three dimensions: learning; teaching; and leading. Each

year, schools assess their practices against the School Excellence Framework to develop their plans in consultation with school communities, report progress in their annual reports and have their self-assessment validated by a panel every five years.

In March 2015, Minister Piccoli announced the Supported Students, Successful Students initiative to fund comprehensive support for public schools over four years to enhance the well-being of students. The initiative includes additional school counselling positions, scholarships to boost the recruitment of school counselling staff, additional student support officers, resources to support Aboriginal students and their families, and support for refugee students, who have experienced trauma.

In September 2016, the New South Wales Government funded the Literacy and Numeracy Strategy 2017 to 2020 concentrating on continued focus on intervention in early childhood education, guidance in explicit instruction and better diagnostic assessments, more support for literacy and numeracy in secondary schools, training preservice teachers, and conducting evaluations.

The bilateral agreement focuses on the review of the New South Wales Curriculum and implementation of the revised curriculum as the main element for the reform plan to support students, student learning and achievement.

In September 2018, Rob Stokes, the Minister for Education, announced terms of reference for the review to be conducted by the NSW Education Standards Authority over 18 months. The review will articulate the purpose of the curriculum, identify essential knowledge, skills and attributes, explain how the curriculum could be redesigned, and identify the implications of any new approach to curriculum design. The NSW Education Standards Authority engaged Professor Geoff Masters, chief executive officer of the Australian Council for Educational Research as lead reviewer, and formed a taskforce to support the review. The NSW Education Standards Authority Board acts as a reference group for the review. The NSW Education Standards Authority commissioned John Hughes, an academic at Western Sydney University, to develop a background paper on the history of the New South Wales Curriculum since 1989, and Learning First, an education research and consulting group based in Melbourne, to conduct case studies on curriculum reforms in Louisiana and British Columbia in consultation with state and provincial expert advisers to highlight innovation and best practice. The NSW Education Standards Authority developed several resources to facilitate discussion among stakeholders and provide feedback to the review. Fourteen public meetings were held at metropolitan and regional centres across New South Wales in October 2018 to collect feedback, more than 50 meetings were held with stakeholder groups in November 2018, and feedback was collected by an online survey. The NSW Education Standards Authority is due to present an interim report to the Minister for Education analysing feedback from the consultation, and to present the final report to the Minister for Education by the end of 2019 analysing feedback from further consultation after release of the interim report.

The reform plan that the Department of Education, Catholic Schools NSW and the Association of Independent Schools of NSW are collaborating to support students, student learning and achievement consists of four actions. By the end of 2019, the three sectors are delivering the curriculum review to ensure the education system is preparing students for challenges and opportunities for the future. From 2020, the three sectors will implement the revised curriculum ensuring teachers are supported to implement it, including formative assessments. By the end of 2020, the three sectors will embed evidence-based practices, including implementing the Literacy and Numeracy Strategy 2017 to 2020. From 2019 onwards, the three sectors will meet the needs of students-at-risk of educational disadvantage through evidence-based pedagogy, instruction and innovation.

### ***Northern Territory***

The bilateral agreement between the Northern Territory and the Australian Government emphasises the focus areas of the *Strategic Framework for 2018 to 2022* as the main element for the reform plan to support students, student learning and achievement.

In 2017, the Northern Territory Department of Education convened six community forums and collected feedback by an online survey to develop the *Strategic Framework for 2018 to 2022*. Launched in November 2017, the Strategic Framework sets out five focus areas: school leadership; quality teachers; differentiated support; community engagement; and data and accountability. Policy directions based on the Strategic Framework focus on improving literacy and numeracy, improving teacher proficiency in literacy and numeracy through a coaching program, strengthening school leadership to advance school improvement, and increasing the number of Aboriginal teachers.

The bilateral agreement acknowledges challenges in providing education to remote and very remote schools, and a student population with a high proportion of students from Aboriginal, non-English speaking and disadvantaged backgrounds. These challenges are being met by the Starting Early for a Better Future Early Childhood Development Plan 2018-2028, implementation of the recommendations of the Royal Commission into the Protection and Detention of Children in the Northern Territory, and funds to improve housing in remote communities over ten years from 2017-2018.

Improving outcomes for Aboriginal students is being met by the Indigenous Education Strategy for 2015 to 2024. Launched in May 2014 following a review conducted by Wilson (2014), the strategy sets out principles and five elements: the education system takes the opportunity to directly shape educational outcomes from the start of a child's life; literacy and numeracy are essential for subsequent success in school; successful completion of secondary education provides options and choices for young adults; the best results are achieved when students are engaged with their learning and attend school regularly; and a high quality and stable workforce improves

student learning outcomes. A vision, target and measure underpin each element. The strategy is designed in four stages comprising three three-year implementation cycles and a final evaluation in the tenth year. Implementation of the first stage from 2015 to 2017 included projects to expand the Families as First Teachers program into remote communities, a mandated curriculum and assessment framework in selected schools that provides a consistent approach to teaching literacy and numeracy, a transition support unit to support families negotiate their children's secondary pathway options, engagement of communities to improve outcomes in student attendance, well-being and achievement, and a workforce plan with a focus on ensuring educators in remote schools are well equipped to deliver improved student outcomes. An evaluation report assessing the strategy's implementation progress, which was released in mid-2016, informed development of the implementation plan for the second stage from 2018 to 2020. Implementation of the second stage includes extension of early childhood services and programs, expanded delivery of literacy and numeracy programs and implementation of the Indigenous Languages and Cultures Curriculum in remote and very remote schools, continued support to Indigenous students to pursue a secondary pathway boarding option and secondary provision in remote and very remote communities, and implementation of an Indigenous employment and workforce strategy, and a remote workforce plan.

In 2016, the Northern Territory Board of Studies reconvened the Indigenous Languages and Cultures Reference Group to develop a policy for teaching Indigenous languages and cultures. The Indigenous Languages and Cultures Reference Group defined five principles for programs in Aboriginal languages and cultures. The Board of Studies released a discussion paper outlining implications of each principle, presenting sets of recommendations and proposing a framework for Indigenous languages and cultures in Northern Territory schools based on the five principles. The discussion paper provided a foundation for the Board of Studies to create a plan for Indigenous languages and cultures in collaboration with stakeholders. Based on the Northern Territory Curriculum Framework and the Framework for Aboriginal Languages and Torres Strait Islander Languages, the plan proposes a curriculum framework consisting of cultural knowledge and content, and six learner pathways: first language bilingual; first language maintenance; language renewal revitalisation; language revival renewal; second language learning; and languages and cultural awareness.

The reform plan that the Department of Education, Catholic Education NT and the Association of Independent Schools of the NT are collaborating to support students, student learning and achievement consists of two actions. NAPLAN Online was implemented in a cohort of schools in May 2019, improved data processes were introduced to increase the integrity of NAPLAN assessment data across the three sectors in September 2019, and all schools will implement NAPLAN Online in May 2020. Pathways for students in remote and very remote schools in providing opportunities and delivering workplace skills and knowledge were tailored by placing mobile

and embedded trainers in 15 remote schools in 2018, and engaging up to 250 students annually in accredited training from 2019.

## **Queensland**

The bilateral agreement between Queensland and the Australian Government focuses on the Advancing Education action plan as the main element for the reform plan to support students, student learning and achievement.

In October 2015, Premier Anastacia Palaszczuk and Minister for Education, Kate Jones, launched an action plan and a discussion paper on coding and robotics in public schools. Seventeen community forums, held in November 2015, were attended by more than 1,000 educators, parents, community members, education stakeholders and representatives of industry. Members of the public participated in two online surveys, and 11 organisations presented written submissions. The action plan was revised and supporting plans for coding counts and global schools through languages were developed and released in June 2016. Each of the eight actions in the plan will be monitored, and progress in delivering them will be reported to Queenslanders.

A confident start will provide a preparatory year for all children from 2017 by offering age-appropriate learning in the preparatory year, engaging more children with disabilities in early learning, and investing in new integrated early year services in areas of need. Schools of the future will fast-track the implementation of the Australian Curriculum for Digital Technologies, coding and robotic programs, establish science, technology, engineering and mathematics virtual academies, and prepare the next generation of information technology entrepreneurs. Global schools through languages will expand the study of cultures and languages, and market Queensland's education system internationally. Senior schooling pathways will introduce a new senior assessment and tertiary entrance system, and expand the number of vocational education and training options in schools. Supporting student learning will establish a state-wide reading centre to provide specialist advice, create an autism hub in partnership with experts, and provide additional guidance officers and mental health coaches. Investing in schools will develop models for resourcing public schools based on need, increase funds, introduce an efficient system for school maintenance, and integrate planning for new schools. Partnering for success will provide active partnerships between public schools and universities or industries, place successful partnerships at the centre of the school improvement agenda, and revitalise the Parent and Community Engagement Framework. Valuing our teachers and educators will establish a professional learning centre to strengthen teaching excellence, place an additional 2,500 teachers in public schools, and transform human resource management to attract and retain the best teachers.

Advancing Education is supported by the *Every Student Succeeding State Schools Strategy for 2018 to 2022*, Advancing Aboriginal and Torres Strait

Islander Education action plan, Inclusive Education policy, and Advancing Rural and Remote Education in Queensland State Schools' action plan.

To support schools of the future, the Queensland Government commissioned a review of science, technology, engineering and mathematics in public schools to investigate the ways in which science, technology, engineering and mathematics are taught and how to improve the connections between research, best practice and existing school practices. The findings of the review, reported by the Queensland Government (2016), formed the basis for creating a strategy for science, technology, engineering and mathematics education in Queensland public schools released in June 2016. In March 2016, the Centre of Excellence in Automation and Robotics, a joint project of the Queensland Department of Education and Training and the Queensland Resources Council, was opened at Alexandra Hills State High School. The Centre aims to provide students in years 7 to 12 enrolled at the school with access to learning opportunities in coding, automation and robotics. In March 2016, the Department of Education and Training launched the Queensland Coding Academy to provide online learning for teachers and students to develop their knowledge, understanding and skills in coding and computational thinking. Resources are made available on the Learning Place, an online repository of digital materials available on the Department of Education and Training's website. In March 2016, the Department of Education and Training held the first STEM Girl Power Camp to coincide with the annual World Science Festival in Brisbane. The Department of Education and Training launched an online STEM hub providing information about resources, STEM careers and pathways, the value of STEM, the Peter Doherty Awards for Excellence in STEM education, and news and events. Support for implementing the Australian Curriculum for Digital Technologies was provided to 72 public schools. The Entrepreneurs of Tomorrow program was delivered to 116 public schools to support implementation of innovative projects focused on digital solutions including coding and robotics. The Queensland virtual science, technology, engineering and mathematics academies commenced providing opportunities for collaboration between students from 102 schools. A STEM teacher symposium, held at Brisbane annually in September, uses experts to enhance knowledge about the latest developments, translating research into practice, modelling best practice and facilitating partnerships.

To support global schools through languages, regional champions were appointed to support school leaders expand the study of languages and cultures. The Department of Education and Training supported innovation and improvement in language education including language immersion programs and a trial of online delivery of languages in the preparatory year. Curriculum resources were developed for Japanese, French, German and Chinese to assist implementation of the Australian Curriculum for Languages. Global schools through languages hubs were provided to school leaders and languages teachers to offer resources and advice, and to parents and students to provide information about the benefits of learning languages.

To support senior schooling pathways, the Queensland Government commissioned the Australian Council for Educational Research to review the systems for senior assessment and tertiary entrance. Matters and Masters (2014) recommended that the systems for senior assessment and tertiary entrance should be redesigned by revitalising school-based assessment, introducing an external assessment, designing a new moderation procedure, and introducing a 60-point scale for reporting students' results. In August 2015, the Queensland Government announced that new senior assessment and tertiary entrance systems would be developed by a Senior Secondary Assessment Taskforce for implementation in 2019. The Queensland Curriculum and Assessment Authority developed the new senior assessment system for implementation in 2019 by revising and aligning the senior syllabuses to the Australian Curriculum and the new assessment model, trialling external assessments in particular subjects at selected trial schools, and trialling processes for improving the quality and comparability of school-based assessments. The new senior assessment system involves students completing four assessments: three school-based assessments; and an external assessment. Teachers design school-based assessments, which are evaluated and endorsed by a network of more than 1,000 trained assessors before administration to students. The reliability of grades, awarded by teachers, is evaluated by 1,400 trained reviewers. The external assessment, which is designed and administered by the Queensland Curriculum and Assessment Authority, is assessed by trained markers.

To support student learning, the Department of Education and Training founded an Autism Hub and Reading Centre based at Woolloongabba in south-eastern Brisbane in February 2016. Overseen by a governance committee of education officials and external stakeholders, and supported by two advisory groups of experts, the Autism Hub and Reading Centre offer an advisory service. The Autism Hub and Reading Centre support autism coaches located in the state's seven regions and reading coaches based in the Reading Centre. The autism coaches offer local workshops to support identified needs in their communities, and the Reading Centre holds workshops focusing on systematic curriculum delivery, effective pedagogical practices, analysis and discussion of data, and differentiated instruction, in which the Australian Curriculum is embedded in the context for learning and Curriculum into the Classroom units are used to model planning processes for reading.

The reform plan that the Department of Education, Queensland Catholic Education Commission and Independent Schools Queensland are collaborating to support students, student learning and achievement consists of three actions. From 2019, the Early Start screening tool is being reviewed and extended to all public and Catholic schools and support to use the Early Start screening tool or similar measures will be provided to independent schools from 2019 to 2021. From 2019 to 2023, the three sectors are implementing the new senior assessment system. From 2019 to 2023, the three sectors are expanding the transition support service for Aboriginal and Torres Strait Islander students entering and leaving boarding schools.



## **South Australia**

The bilateral agreement between South Australia and the Australian Government focuses on strategies for science, technology, engineering and mathematics education, literacy and numeracy, school improvement and Aboriginal education, as the main elements to support students, student learning and achievement.

In November 2016, Susan Close, the Minister for Education and Child Development, released the *STEM Learning Strategy for DECD Preschool to Year 12, 2017 to 2020*, encompassing eleven initiatives. Funds would be provided to upgrade science, technology, engineering and mathematics facilities in 139 public schools. Additional training would be provided to upgrade 500 primary teachers to become specialist science, technology, engineering and mathematics teachers. Preschool teachers would have access to new science, technology, engineering and mathematics resources from 2017. Teachers would use a new approach for instruction, assessment and moderation for science, technology, engineering and mathematics from 2017. A science, technology, engineering and mathematics play program would be implemented in public preschools. The South Australia Department of Education and Child Development would design science, technology, engineering and mathematics career pathways with stakeholders for young people to transition to emerging industries. Student engagement would be developed through a science, technology, engineering and mathematics student ambassadors program and establishment of an Aboriginal Learners Congress. A Year 7 and 8 STEM Collaborative Inquiry project would design, trial and evaluate innovative science, technology, engineering and mathematics projects. The existing network of science, technology, engineering and mathematics focus and advanced manufacturing schools and the Australian Science and Mathematics School, based on the campus of Flinders University, would be extended to identify innovative and effective secondary teachers. An annual science, technology, engineering and mathematics leaders' symposium would be designed.

In August 2016, the Department of Education and Child Development commenced the Year 7 and 8 STEM Collaborative Inquiry project focusing on ways to develop strong links between feeder primary schools and their local high schools to improve students' transition experiences. Science, technology, engineering and mathematics learning projects were designed and trialled over two years by five school networks: Morialta; Orion; South East Coast and Vines; Upper Mid North; and Western Shores. The networks conducted seven projects: health; humanity, sustainability and environment; engineering; food innovation; smart systems and advanced technologies; pedagogical innovation; and future energy and resources.

Following election in March 2018, the Liberal Government implemented its policy of Literacy Guarantee by introducing literacy coaches, phonics checks for year 1 students, dyslexia workshops for parents, parental engagement resources, proficiency standards for literacy and numeracy tests in the

National Assessment Program, literacy and numeracy testing for preservice teachers, revision of examinations for students with disabilities, and breakfast programs for schools. In June 2018, John Gardner, the Minister for Education, announced that the Department of Education would establish a Literacy Guarantee Unit to provide 500 primary teachers with professional learning, support 500 trained primary teachers to train other teachers, offer conferences to provide professional development opportunities to teachers, and direct coaching to teachers, including support in teaching explicit synthetic phonics.

In September 2018, the Department of Education launched the School Improvement Model consisting of the school improvement planning cycle, stages of improvement, the school improvement dashboard, and literacy and numeracy guidebooks. Beginning in term 4, 2018, schools commenced the annual sequence of five steps in the improvement planning cycle: analyse and prioritise; determine challenge to practice; plan actions for improvement; improve practice and monitor impact; and review and evaluate. Each school is assigned a stage of improvement based on the school's academic performance. The school improvement dashboard, which holds data securely about each school's student achievement, student wellbeing and organisational health, provides a customised tool for school leaders and local education teams to inform school improvement planning. The literacy and numeracy guidebooks present evidence-informed literacy and numeracy practices relevant to the school's stage of improvement, which will improve student growth and achievement.

The Department of Education commissioned the South Australian Aboriginal Education and Consultative Council to consult the Aboriginal community to inform development of a new Aboriginal education strategy. In December 2018, the Department of Education released the *Aboriginal Education Strategy 2019 to 2029* setting out a vision, five principles to guide implementation and three goals: Aboriginal children develop foundations for success in the early years; Aboriginal children and young people excel at school; and Aboriginal young people are on the pathways to success. The goals are supported by engaging Aboriginal communities to develop the culture and identity of their children and young people, and building a strong, culturally responsive organisation by focusing on six areas: teaching practice and curriculum delivery; languages; engaging families and communities; workforce development; funding policy; and Aboriginal governance, service design and delivery. The Strategy includes an implementation and accountability framework that sets out measures and indicators for attaining each goal. Eleven initiatives will be accomplished over the first three years. First a South Australian model for culturally responsive teaching will be developed for education in the early years. Second, the delivery of Aboriginal histories and cultures will be strengthened across the curriculum. Third, individual learning plans will be developed for Aboriginal students. Fourth, opportunities will be extended for students to engage in Aboriginal languages and cultures. Fifth, professional learning, support and pathways will be increased for Pitjantjatjara and Yankunytjatjara language and culture. Sixth, an online professional development resource and capability framework will be

developed for teachers of Aboriginal students for whom English is an additional language. Seventh, the work-about program will be expanded to support young Aboriginal people to transition from school to employment, training and further education. Eighth, job and traineeship pathways for young Aboriginal people will be negotiated with employers. Ninth, the South Australian Aboriginal Sports Training Academy will be expanded from 16 to 21 academies. Tenth, an Aboriginal workforce plan will be developed to inform future staff strategies. Eleventh, a framework will be developed to establish standards, awareness and cultural responsiveness of education.

The reform plan sets out separate actions for the Department of Education, Catholic Education SA and the Association of Independent Schools South Australia to support students, student learning and achievement. In 2019, a set of tailored guides were provided to all public schools to support improvements in literacy and numeracy. By 2020, 500 teachers with expertise in science, technology, engineering and mathematics will be employed in primary schools in the public sector. In 2019, all year 1 students in public schools were screened by a phonics-based literacy and numeracy assessment, and the Literacy Guarantee Unit became operational. A construction program is being undertaken by the Department of Education to revitalise ageing infrastructure and increase capacity. Between 2019 and 2023, year 7 is being moved to the high school level in public schools. Between 2019 and 2023, Catholic schools will implement the Living Learning Leading Framework. Between 2019 and 2023, Catholic schools will build system capacity, teacher and leader capacity, and dynamic and sustainable partnerships in science, technology, engineering and mathematics education. By 2022, Catholic schools will implement the Catholic Education South Australia literacy and numeracy strategies. By 2022, year 7 will be moved to the high school level in Catholic schools. Between 2019 and 2023, independent schools will use the High Impact School Improvement Tool to provide evidence-informed improvement practices that meet the cultural and contextual needs of students. Between 2019 and 2021, independent schools will implement the learning progressions for literacy and numeracy. In 2019 and 2020, a STEM Task Force is implementing an audit tool, developing a research bank, establishing partnerships, and implementing school-based strategies in science, technology, engineering and mathematics education. Independent schools are implementing a phonics-based literacy screening assessment in 2019, and participating schools are implementing the Resolve Mathematical Inquiry Project in 2019 and 2020. Between 2019 and 2022, the Responding to Early Adolescent Learners Committee is investigating and scaling best practice in middle schooling. In 2018 and 2019, Aboriginal students in independent secondary schools are being provided with mentoring support.

## **Tasmania**

The bilateral agreement between Tasmania and the Australian Government emphasises the importance of the *Strategic Plan for 2018 to 2021* in

underpinning the reform plan to support students, student learning and achievement.

Following consultation with stakeholders, the *Strategic Plan for 2018 to 2021* was released in October 2017. Structured around the concept, *Learners First: Every Learner, Every Day*, the strategic plan sets out a commitment, values, goals, priorities and an approach to improvement. The values of aspiration, respect, courage and growth are reflected in four goals: access, participation and engagement; early learning; well-being; and literacy and numeracy. All schools set their own priorities by using inquiry cycles for improvement that contribute to the goals.

The bilateral agreement acknowledges the importance of structural changes occurring in early childhood education, enactment of the Education Act 2016 requiring all students to complete year 12 from 2020, and the program to extend years 11 and 12 to rural high schools. The bilateral agreement focuses on the review of years 9 to 12 as the main element for the reform plan to support students, student learning and achievement.

In June 2016, the Tasmanian Government commissioned the Australian Council for Educational Research to identify opportunities to improve attendance, retention and attainment outcomes in years 9 to 12 by reviewing student and workforce data, curriculum policy and provision, and design and delivery across the three education sectors. The Australian Council for Educational Research (2016) found that there are major policy issues relating to educational provision for years 9 to 12 students that should be addressed by seven recommendations and additional policy options. Following the review, the Years 9 to 12 Steering Committee was charged with overseeing implementation of the recommendations. In February 2018, a workshop was held for representatives of the three education sectors to determine a way forward to implement the recommendations. Lambert (2018a) reported that the participants discussed issues and made nine recommendations associated with developing a pathways approach for years 9 to 12, scoping work to develop a Years 9 to 12 Curriculum Framework, and clarifying the status and provision of vocational education and training and vocational learning. A series of discussion papers outlining the Tasmanian context, and discussing issues referring to curriculum, assessment and instruction, and vocational education and training and vocational learning were released. Following the workshop, a governance structure was formed to coordinate the work of the Years 9 to 12 Project. In August 2018, nine learning area groups were formed to provide advice about the Years 9 to 12 Curriculum Framework, tools and resources. In September 2018, ten curriculum forums were held for over 120 principals and teachers to discuss the appropriateness of the draft Years 9 to 12 Curriculum Framework. In October and November of 2018, eight forums were held for 160 participants from schools, registered training organisations, industry and community stakeholders to discuss opportunities to improve the status of vocational education and training and vocational learning in schools. In November 2018, nearly 100 members of the learning area groups met to refine the draft Years 9 to 12 Curriculum Framework.

The version of the draft Years 9 to 12 Curriculum Framework, released in April 2019, consists of three elements: valued practices and concepts; curriculum areas; and areas for consideration. The Years 9 to 12 Curriculum Framework is based on six valued practices and concepts: general capabilities; cross-curriculum priorities; learning areas; student agency; vocational learning; and local and global contexts. The Years 9 to 12 Curriculum Framework is organised into five curriculum areas: discipline-based study; transdisciplinary projects; professional studies; work-based learning; and personal future. Planning, structuring, implementing and recycling decisions are derived from six areas for consideration: pathways; vertical integration; modularisation; micro-credentials; levels of complexity; and new course incubation.

The reform plan that the Tasmania Department of Education, Catholic Education Tasmania and Independent Schools of Tasmania are collaborating to support students, student learning and achievement consists of seven actions. From 2019 onwards, the three sectors are contributing to the national effort relating to learning progressions, formative assessment and the review of senior secondary education. From 2019 onwards, the three sectors are meeting the needs of students at risk of educational disadvantage through evidence-based pedagogy, instruction, leadership and innovation. From 2019, the three sectors are implementing the recommendations from the Years 9 to 12 Review focusing on developing a curriculum framework, revising accreditation and certification standards for completion of year 12, developing a strategic response to gaps in the workforce and reviewing the use of data. In 2019, independent schools are implementing learning progressions for literacy and numeracy. From 2019 onwards, independent schools are providing opportunities and access to professional learning and networking for school leaders. In 2019, Catholic schools are collaborating to establish uniform feedback and reporting mechanisms to the Australian Curriculum, Assessment and Reporting Authority. In 2019, Catholic schools are trialling the Staff Learning Management System to enhance tracking and delivery of professional development.

## **Victoria**

The bilateral agreement between Victoria and the Australian Government focuses on the Education State initiatives and the Victorian Curriculum as the main elements for the reform plan to support students, student learning and achievement.

In the lead up to the 2014 election, the Australian Labor Party made a commitment to establish Victoria as the 'Education State'. To design a clear plan for the Education State, the Victoria Department of Education and Training released a consultation paper intended to guide discussion in the wider community. Following release of the consultation paper in June 2015, a series of meetings were held across Victoria with stakeholders, discussions were held by groups, and individuals participated in online conversations.

The feedback from the consultation was analysed to develop Education State targets in four areas: learning for life; happy, healthy and resilient kids; breaking the link; and pride and confidence in our schools. James Merlino, the Minister for Education, appointed the Minister's Expert Panel for Schools, consisting of education experts from universities and a policy adviser, to develop seven initiatives.

In September 2015, the Department of Education and Training released a policy document at the launch of the Education State held at Wellington Secondary College. The policy document set out funding allocations, the Education State initiatives, the Education State targets, the introduction of the Framework for Improving Student Outcomes, professional development for principals through programs for local leaders, future leaders and expert leaders, professional development to train school leadership teams implement the Victorian Curriculum, 60 secondary teachers to become science, technology, engineering and mathematics catalysts, 200 primary teachers to become mathematics and science specialists, the design of the Insight Assessment Platform, development of an Aboriginal education strategy, establishment of navigator services to re-engage young people in education and training, and the establishment of lookout education support centres.

The implementation strategy underpinning the Education State initiatives employs regional structures, school leaders and teachers in the existing education system to act as change agents in establishing Learning Places, Communities of Practice and Professional Learning Communities. As well as forming the new Learning Places regional model, tech schools, lookout education support centres and navigator form key elements for Learning Places. The Communities of Practice approach creates networks for school leaders to learn and share best practice by participating in professional learning programs offered by the Bastow Institute of Educational Leadership and applying the Framework for Improving Student Outcomes. Professional Learning Communities, which provide the structure that teachers need to collaborate and improve professional practice, are supported by the Victorian Curriculum, the Literacy and Numeracy Strategy and the Insight Assessment Platform.

Jenny Mikakos, the Minister for Families and Children, appointed the Minister's Early Childhood Development Expert Panel, consisting of early childhood experts from universities, to develop the Education State Early Childhood Reform Plan, consisting of four key directions. First, supporting higher quality services and reducing disadvantage in early childhood would be facilitated by changing the way of funding kindergarten, helping kindergarten deliver high-quality early education, and delivering more early childhood facilities. Second, providing more support for parenting would be expedited by strengthening maternal and child health services, and building parenting skills through community playgroups. Third, making early childhood services more accessible and inclusive would be expedited by improving participation of children in kindergarten, supporting children with disabilities, and supporting Aboriginal families. Fourth, building a better system would be facilitated by

developing partnerships between state and local government, making access to services easier, and working with the federal government.

In September 2015, Premier Daniel Andrews and James Merlino, the Minister for Education, launched the Victorian Curriculum representing the final iteration of AusVELS. The Victorian Curriculum is based on three important conceptualisations that distinguish it from the Australian Curriculum. First, it includes four capabilities - critical and creative thinking, ethical, intercultural, and personal and social – that are organised by content descriptions and achievement standards. Second, the cross-curriculum priorities are embedded in the learning areas. Third, it is organised as a continuum of levels of learning achievement not as year levels.

The reform plan that the Department of Education and Training, Catholic Education Commission of Victoria and Independent Schools Victoria are collaborating to support students, student learning and achievement consists of six actions. In 2020, the three sectors will design a digital assessment library providing an online resource consisting of student assessments and professional resources to improve assessment of student learning. From 2019, the Department of Education and Training is providing scholarships for teachers to undertake postgraduate courses in special education. From 2019, careers education in public schools is being modified by providing access to Careers-e-Portfolio, and professional career diagnostic assessment and guidance. From 2019 onwards, Head Start school-based apprenticeships and traineeships are being implemented in public secondary schools to provide a flexible model involving an additional year at the senior secondary level involving an opportunity to learn a trade at school. From 2019, the three sectors are developing and implementing cross-sectoral guidelines to support the transition of students expelled from school to a new education, training or employment setting. From 2019, Catholic schools are participating in Getting it Right from the Start, a project to improve oral language and literacy outcomes in the first two years of school with a focus on intervention in low performing schools.

### ***Western Australia***

The bilateral agreement between Western Australia and the Australian Government outlines various initiatives for the reform plan to support students, student learning and achievement.

The bilateral agreement acknowledges challenges in providing education across a large land mass to a substantial number of schools located in regional and remote areas. This challenge is being met by several measures. Significant funds are being invested in building new schools and maintaining existing schools in the public sector. Focus is being placed on instruction in literacy and numeracy, development of student innovation, creativity and entrepreneurial skills, implementation of the languages syllabuses, and development and implementation of science, technology, engineering and mathematics education and digital technologies to raise student outcomes.

Key initiatives include professional learning to improve teacher performance, policy development to reduce bullying and cyberbullying in schools, investment in providing science laboratories in 200 schools, and placing 300 education assistants, 50 Aboriginal and Islander education officers and 120 teachers in schools. Diagnostic assessments of literacy and numeracy understanding and skills are being administered to pre-primary students, and 21 child and parent centres were established in low socioeconomic communities to support the provision of kindergarten to all children. The challenge of remoteness is being met by the Rural and Remote Training Schools Project and implementation of the Aboriginal Cultural Standards Framework to improve outcomes for Aboriginal students. Development and implementation of initiatives in languages and science, technology, engineering and mathematics form key curriculum reforms.

In June 2014, the School Curriculum and Standards Authority commissioned a review into the provision of languages across pre-primary to year 12. Coghlan and Holcz (2014) found that a high proportion of students studied a language in years 3 to 7 across the three sectors, but there were significant reductions in the number of students studying languages in the transitions from year 8 to year 9 and year 9 to year 10. In March 2015, the School Curriculum and Standards Authority convened a languages stakeholders' forum, which was attended by approximately 100 people representing schools, professional associations, universities and community organisations. Feedback from the forum assisted the School Curriculum and Standards Authority to develop requirements for the implementation of pre-primary to year 10 languages education. Schools, where possible, are required to provide one language in years 3, 4, 5 and 6 commencing in year 3 in 2018, and in years 7 and 8 commencing in year 7 in 2022, although the study of languages is optional in years 9 and 10. In response, the School Curriculum and Standards Authority developed Languages syllabuses for Chinese, Japanese, Indonesian, French, German and Italian, which were released in July 2016. Furthermore, the study of an Aboriginal language is appropriate, students for whom English is a second language may study English-as-a-second-language, the study of Auslan is appropriate, and schools may offer a language other than those provided by the School Curriculum and Standards Authority.

In 2016, the Western Australia Department of Education formed a partnership with Scitech, an organisation that operates an interactive science museum. Scitech created a consortium with the Educational Computing Association of Western Australia, the Mathematical Association of Western Australia, and the Science Teachers Association of Western Australia to develop science, technology, engineering and mathematics resources aligned with the Western Australian Curriculum. The consortium formed a Project Control Group to conduct the STEM Learning Project. In May 2017, Sue Ellery, the Minister for Education and Training, announced funding for the STEM Learning Project at a showcase event hosted by Scitech. The aim of the three-year project is to develop 40 resource modules for kindergarten to year 12, provide professional learning to support implementation of the modules across Western Australia, and offer online support accessible from the Connect



portal. Conduct of the project involves holding workshops for primary and secondary teachers from public schools across the eight education regions until completion of the project in 2019. The workshops focus on examining the modules and discussing their use in classrooms. The Department of Education is placing a particular focus on science, technology, engineering and mathematics to ensure students develop the problem-solving, negotiation and critical thinking skills essential for future careers. Early in 2016, the Department of Education, in partnership with Innovation Unit Australia, commenced the Teacher Development Schools STEM Innovation Partnerships initiative. Community experts and staffs from 29 schools developed professional practices to increase student engagement. Resources and expertise were shared with other schools in 2017. A resource kit of programmable interactive robots and electronic engineering resources to create real world projects, and touch tablet devices were delivered to 655 schools with primary-aged students. A science, technology, engineering and mathematics plan consisting of 32 projects was designed to support schools increase student engagement.

The reform plan that the Department of Education, Catholic Education Western Australia and the Association of Independent Schools Western Australia are collaborating to support students, student learning and achievement consists of three actions. The first action consists of two components: improving student engagement and wellbeing in schools; and improving classroom practice and virtual learning opportunities. In the former component, the three sectors are implementing various strategies to support positive student behaviour, student health and wellbeing in schools, and reduce bullying. In the latter component, Catholic schools are delivering professional learning for the Vision for Learning and Five Teacher Practices in 2019 and 2020, and continuing to design the Virtual School Network in 2019 onwards. In 2019 and 2020, independent schools are investigating university pathways by trialling and implementing portfolio entry, and in 2019 onwards, the three sectors are contributing to the national effort to review senior secondary education, pathways to work, further education and training, and university entry. From 2018 to 2020, the three sectors are focusing on the Australian Curriculum general capabilities and continuing to support the use of formative assessment tools, such as Brightpath.

## **Discussion**

The discussion section interprets the results of the study relating to the four research questions. What were the responses of education commentators reported in educational literature to the recommendations presented in the national policy reports? Did the priorities of policymakers, education experts or officials influence selection of reform actions included in the bilateral agreements? Did the decision-making process lead to specific reform actions included in the bilateral agreements that show close alignment to existing state-level curriculum reforms? Did the recommendations presented in the national policy reports influence emerging curriculum reforms at the national and state levels?

Searches in the Australian Education Index and the Educational Resources Information Center's website identified fewer citations of educational literature relevant to the national policy reports than expected. Only four citations were judged to represent critical analyses of the recommendations in the report, *Through Growth to Achievement: Report of the Review to Achieve Educational Excellence in Australian Schools*. No citations were identified that referred to the reports, *Optimising STEM Industry-School Partnerships: Inspiring Australia's Next Generation* or the *Independent Review into Regional, Rural and Remote Education: Final Report*. Each of the four citations espoused particular opinions concerning the recommendations in the report.

Lambert (2018b), a former curriculum manager in the Australian Curriculum, Assessment and Reporting Authority, believed the recommendations proposed by the Review to Achieve Educational Excellence in Australian Schools reflect educational reforms occurring internationally. The recommendations represent a repurposing and rethinking of the education system to meet the needs of a changing world, not faddish policy reform nor policy-borrowing. Lambert identified three distinct responses to the release of the recommendations. Some respondents believed they reflected genuine reforms, but some respondents viewed them as unexceptional, while other respondents believed they threatened the status quo. Lambert identified that the vision for policy reform needs to focus on three issues: stakeholder influences on the written curriculum; preparedness of teachers to teach the experienced curriculum; and administration of assessment techniques. Lambert concluded that the recommendations represent a shift that honours disciplines, recognise the need to monitor individual student progress and assess the need for evidence as a basis for change and innovation.

Brooks and Sinclair (2018), a professor and a PhD student in RMIT University with expertise in educational leadership, analysed issues affecting school leaders raised in the report of the Review to Achieve Educational Excellence in Australian Schools. An overview of the three priorities and five areas, covered in the report, are outlined. An in-depth analysis of the report's recommendations relating to school leaders is presented as a set of questions. The analysis supported the following conclusions reached by the authors. They found that many states have already developed student-centred models for delivery of high-quality education. They presented guidelines for school leaders to support differentiated instruction in classrooms. They supported the need for schools to generate student data to facilitate differentiated instruction that suits individual students. They supported the concept that school leaders need to know the strengths and weaknesses of teachers in their schools. They acknowledged that school leaders need to have an understanding of instructional strategies and transactional practices. They acknowledged the need for student voice to be considered in the operations of schools. They supported the need for school leaders to encourage teachers and students to focus on research as a critical aspect of their work. Brooks and Sinclair concluded that school leaders

should consider the report's recommendations as they assess how their leadership may guide improvement in student outcomes.

Buckingham and Joseph (2018), research fellows in the Centre for Independent Studies, focused on the key recommendations to develop the general capabilities as learning progressions, the use of an online assessment tool to assess learning growth and the establishment of a national education research and evidence institute. They questioned whether the general capabilities are generic skills that can be conceptually sequenced on developmental progressions and whether they can be assessed separately from content knowledge. They were critical of the recommendation that an online assessment tool could measure learning growth and they believed teachers lack training and time to use the tool for continuous individual assessment of learning growth. Furthermore, they contended that there is no evidence to support the view that incubating students with a growth mindset can affect their academic achievement. They supported establishment of an independent research and evidence institute, but they argued that the governance structure for such an entity needs to be defined in specific terms. Finally, they contended that the review panel failed to address the terms of reference adequately by providing details about the cost and cost-effectiveness of their recommendations. They concluded that the review panel should have identified the school-based factors showing the strongest relationship to student achievement, examined which level of government would be most likely to influence and enable these factors, and made clear implementation recommendations for the federal government, state governments, school communities, principals and teachers.

Savage (2019), a senior lecturer in the University of Melbourne with expertise in educational policy, contended that the reforms proposed by the Review to Achieve Educational Excellence in Australian Schools represent a fundamental shift away from existing structures of schools and will face major challenges. The reforms stress the importance of personalisation, data and technology as the means for driving improvement across a variety of areas with the most substantive reforms focusing on organising the curriculum as learning progressions and basing assessment on learning growth. Savage argued that implementation of these reforms would be difficult, disruptive and costly. Furthermore, the case for pursuing these reforms is not supported by research evidence and testing to understand the potential impact on the education system. Savage concluded that the federal government's enthusiasm for pursuing these reforms may face resistance from state and territory ministers for education and education officials as well as school personnel.

The overwhelming evidence derived from the survey indicates that officials in federal, state and territory education agencies together with officials in the Catholic and independent education sectors were primarily responsible for determining what was included in the bilateral agreements. The official in the Australian Government Department of Education reported that the decision-making process varied from jurisdiction to jurisdiction. An informant from New South Wales emphasised the complexity of interactions occurring across

sectors in a series of forums between officials from the Department of Education, the NSW Education Standards Authority, and the Catholic and independent education. An informant from the Australian Capital Territory reported that existing consultative meetings between the Education Directorate and independent education sectors were used to collaborate in the decision-making process to select elements included in the bilateral agreement and to determine the role of each education sector in implementing the actions. On the other hand, there is no evidence that education experts, commissioned by the Australian Government to conduct the reviews that led to the national policy reports, were involved in the decision-making process to select elements included in the bilateral agreements. The role of state and territory ministers for education in the decision-making process seems to have been limited to being kept informed about the outcomes of the decision-making process and approving the bilateral agreements at the conclusion of the decision-making process. However, evidence collected from the survey suggests that the role of state and territory ministers for education varied from jurisdiction to jurisdiction. South Australia's Minister for Education reported requesting advice from each education sector about the sectors' priorities in reflecting the state government's election platform for education. In New South Wales, the bilateral agreement was referred for approval by the Cabinet before the Minister for Education signed the agreement.

The comparison of the existing and proposed curriculum being implemented in the Australian Capital Territory shows strong alignment, because the systemic reform, Future of Education Strategy, supports instruction based on the Australian Curriculum through various actions designed for its four foundations. Developing students' interests through personalised learning plans is a key element of the first phase implementation plan. The comparison of the existing and proposed curriculum under review in New South Wales shows strong alignment, because the New South Wales Curriculum Review focuses on defining a purpose for the curriculum, identifying essential knowledge, skills and attitudes for the Australian Curriculum in New South Wales. Hughes (2019) concluded that curriculum reforms in New South Wales have been preoccupied with the same challenges of enhancing educational equity, the role of standards-based assessment, and decluttering the curriculum, which has led to incremental changes over the last 30 years, but there has been no fundamental reshaping of the structure and organisation of the curriculum. The current New South Wales Curriculum Review focuses on the same challenges, but also promises to determine a new curriculum design to support instruction, assessment and reporting student outcomes. The comparison of the existing and proposed curriculum being implemented in the Northern Territory shows limited alignment, because curriculum reform focuses on strategies to improve outcomes of students in remote and very remote schools. Curriculum reform initiatives are now targeted at raising outcomes of Aboriginal students attending remote and very remote schools through the Indigenous Education Strategy with the implementation plan for the first stage focusing on the Literacy and Numeracy Essentials program and the implementation plan for the second stage focusing on implementation of the Indigenous Languages

and Cultures Curriculum. The comparison of the existing and proposed curriculum being implemented in Queensland shows strong alignment, because the systemic reform, Advancing Education, supports instruction in particular learning areas of the Australian Curriculum. Advancing Education's actions focus on implementing the Australian Curriculum for digital technologies, science, technology, engineering and mathematics, languages, and literacy and numeracy. The comparison of the existing and proposed curriculum being implemented in South Australia shows limited alignment, because curriculum reform focuses on particular strategies. These initiatives are targeted at science, technology, engineering and mathematics, literacy and numeracy, Aboriginal education and school improvement. The comparison of the existing and proposed curriculum being implemented in Tasmania shows limited alignment, because curriculum reform is restricted to improving retention, attendance and achievement for students in years 9 to 12. The Years 9 to 12 Project focuses on developing a curriculum framework for years 9 to 12, and clarifying the status of vocational education and training and vocational learning. The comparison of the existing and proposed curriculum being implemented in Victoria shows strong alignment, because the Victorian Curriculum forms a key element of the systemic reform, the Education State. Professional learning, designed to support school leaders and teachers implement the Victorian Curriculum, forms the main constituent. The comparison of the existing and proposed curriculum being implemented in Western Australia shows limited alignment, because curriculum reform focuses on particular strategies. Curriculum reform initiatives are targeted on the STEM Learning Project and implementation of the Languages syllabuses.

The findings of the review showed that the recommendations of the national policy reports are influencing emerging curriculum reform at the national level, but in a more measured way than some commentators had anticipated in the opinions they expressed in educational literature. Limited to developing voluntary learning progressions and aligned formative assessment resources, the National Learning Progressions and Online Formative Assessment Initiative is intended to provide teachers with supplementary resources to support the Australian Curriculum. Taking into account that the service design and delivery process encompasses activities for research, development, diffusion and adoption, the limited scope of the National Learning Progressions and Online Formative Assessment Initiative is unlikely to lead to a costly and difficult developmental process or its implementation would be disruptive for schools. However, there seems to be a potential shortcoming inherent in the rigour of the methodological model being applied in the National Learning Progressions and Online Formative Assessment Initiative. While the Digital Transformation Agency's service design and delivery process may suffice for designing the initiative's digital services, adoption of a model used by the Australian Government for designing public services suggests that alternative models may not have been considered by policymakers. Instead, consideration should be given to models for evaluating educational programs that gained acceptance in the 1970s. Use of a decision-oriented approach for program evaluation, such as the Context Input Process Product (CIPP) Model, proposed by Stufflebeam, Foley, Guba, Hammond, Merriman and Provus (1971), would allow the project team to

collect information for making judgments according to the relative advantages and disadvantages of each alternative in terms of the model's specified criteria in relation to the context in which the program fits, input to determine its mission and goals, process to investigate the quality of its implementation, and product to assess its effects on users. The CIPP Model would provide a recommended framework for guiding decision-making to plan, structure and implement the learning progressions and aligned formative assessment resources, and then provide feedback on their effectiveness to make judgments for continuous improvement in the program.

It is more difficult to determine whether the recommendations of the national policy reports have had a direct impact on state-level curriculum reforms. The Future of Education conversation in the Australian Capital Territory was initiated before the appointment of the panel to conduct the Review to Achieve Educational Excellence in Australian Schools. Whereas the four foundations set out in the Future of Education Strategy are consistent with the focus areas for improvement discussed in the report of the Review to Achieve Educational Excellence in Australian Schools, evidence suggests that the four foundations were defined entirely as an outcome of the Future of Education conversation. Although the New South Wales Curriculum Review is still in progress at the time of writing this report, it is apparent that the national policy reports as well as curriculum reforms occurring internationally are likely to affect its outcome. Since the Advancing Education action plan in Queensland was launched about two years before the appointment of the panel to conduct the Review to Achieve Educational Excellence in Australian Schools, evidence suggests that the eight actions in Advancing Education were derived solely from the community forums held in November 2015. Similarly, the Review of Years 9 to 12 in Tasmania was initiated more than a year before the appointment of the panel to conduct the Review to Achieve Educational Excellence in Australian Schools. The focus of the Years 9 to 12 Project on developing a Years 9 to 12 Curriculum Framework, and clarifying the status and provision of vocational education and training and vocational learning arose from the Review of Years 9 to 12. Again, the Education State reform was launched in Victoria almost two years before the appointment of the panel to conduct the Review to Achieve Educational Excellence in Australian Schools. Evidence indicates that the Education State initiatives were developed solely from consultation with the Victorian community followed by input from an expert panel.

## **Conclusion**

The discussion of the results presents an interpretation and integration of the key findings of this study. Once the outcomes of the reform directions and national policy initiatives in the National School Reform Agreement become known, it may become possible for evaluators to judge the value of national and state-level reforms. Judgments about the value of these reforms are likely to yield some recommendations for improving programs arising from the National Learning Progressions and Online Formative Assessment Initiative as well as state-level curriculum reforms.

## References

- Australian Council for Educational Research. (2016). *Review of Years 9 to 12 Tasmania*. Melbourne, VIC: Australian Council for Educational Research.
- Australian Government Department of Education, Employment and Workplace Relations. (2011). *Review of Funding for Schooling*. Canberra, ACT: Australian Government Department of Education, Employment and Workplace Relations.
- Australian Government Department of Education and Training. (2018). *Through Growth to Achievement: Report of the Review to Achieve Educational Excellence in Australian Schools*. Canberra, ACT: Australian Government Department of Education and Training.
- Baker, J. and Cox, R. (2018). *Great Teaching, Inspired Learning: an Evaluation of the Cadetship and Internship Programs*. Sydney, NSW: New South Wales Department of Education.
- Brooks, J. and Sinclair, M. (2018). Should school leaders give a Gonski (2.0)? Implications of the Report of the Review to Achieve Educational Excellence in Australian Schools. *Australian Educational Leader*, 40: 4, 32-35.
- Buckingham, J. and Joseph, B. (2018). *What the Gonski 2 Review got wrong?* (Policy Paper no. 6). Sydney, NSW: The Centre for Independent Studies.
- Cawsey, C., Hattie, J. and Masters, G. (2019). *Growth to Achievement: On Demand Resources for Teachers*. Canberra, ACT: Australian Government Department of Education and Training.
- Clinton, J. M., Aston, R. and Quach, J. (2018). *Promoting Evidence Uptake in Schools: a Review of the Key Features of Research and Evidence Institutions*. (Report prepared for the Education Excellence Review Secretariat, Australian Government Department of Education and Training). Melbourne, VIC: University of Melbourne.
- Coghlan, P. and Holcz, P. (2014). *The State of Play: Languages Education in Western Australia*. Cannington, WA: School Curriculum and Standards Authority.
- Cox, R., Snowball, L., Rintoul, D. and Ahn, M. (2018). *Great Teaching, Inspired Learning Evaluation of School Leadership Initiatives*. Sydney, NSW: New South Wales Department of Education.
- Education Council. (2015). *National STEM School Education Strategy: a Comprehensive Plan for Science, Technology, Engineering and Mathematics Education in Australia*. Carlton South, VIC: Education Council.
- Education Council. (2018). *Optimising STEM Industry-School Partnerships: Inspiring Australia's Next Generation*. Melbourne, VIC: Education Services Australia.
- Education Council. (2019). *STEM School Interventions*. Carlton South, VIC: Education Council.
- Finn, J., Gould, L., Goodall, A. and Watkins, I. (2017). *Great Teaching, Inspired Learning: Beginning Teacher Support Evaluation Report*. Sydney, NSW: New South Wales Department of Education.
- Goodall, A. (2015). *Connected Communities Strategy: Interim Evaluation Report*. Sydney, NSW: New South Wales Department of Education.

- Griffiths, A., Watkins, I., Johnston-Anderson, N. and Summelin, S. (2018). *Local Schools, Local Decisions Evaluation Interim Report*. Sydney, NSW: New South Wales Department of Education.
- Halsey, J. (2018). *Independent Review into Regional, Rural and Remote Education: Final Report*. Canberra, ACT: Australian Government Department of Education and Training.
- Hoven, C. and Baker, J. (2018). *Great Teaching, Inspired Learning Professional Experience Evaluation Report*. Sydney, NSW: New South Wales Department of Education.
- Hughes, J. (2019). The antecedents of the New South Wales Curriculum Review: an introduction to the New South Wales curriculum style. *Curriculum Perspectives*, 39: 2, 147-157.
- Lambert, P. (2018a). *Years 9 to 12 Review Workshops, 19-20 February 2018, Report*. Stanmore, NSW: Phil Lambert Consulting.
- Lambert, P. (2018b). Curriculum reform: policy to practice. *Professional Educator*, 18: 1, 12-15.
- Matters, G. and Masters, G. H. (2014). *Redesigning the secondary-tertiary interface: Queensland Review of Senior Assessment and Tertiary Entrance*. Brisbane, QLD: Australian Council for Educational Research.
- Mazurki, E., Finn, J., Goodall, A. and Wan, W. (2016). *The Rural and Remote Education Blueprint: Interim monitoring and evaluation report*. Sydney, NSW: New South Wales Department of Education.
- National School Resourcing Board. (2018). *Review of the Socio-economic Status Score Methodology: Final Report*. Canberra, ACT: Australian Government Department of Education and Training.
- Queensland Government. (2016). *Interim Review of STEM Education in Queensland State Schools*. Brisbane, QLD: Queensland Government.
- Regional Education Expert Advisory Group. (2009). *National Regional, Rural and Remote Tertiary Education Strategy: Final Report*. Canberra, ACT: Commonwealth of Australia.
- Savage, G. (2019). The hope of radical personalisation. *Professional Voice*, 2: 3, 12-17.
- Stufflebeam, D.L., Foley, W.J., Gephart, W.J., Guba, E.G., Hammond, R.L., Merriman, H.O. and Provus, M.M. (1971). *Educational Evaluation and Decision Making*. Itasca, IL: F.E. Peacock Publishers.
- Urbis. (2018). *Regional Student Accommodation Assessment*. Melbourne, VIC: Urbis.
- Watt, M. G. (2018). *A Comparison of the Change Process in States' and Territories' Implementation of the Australian Curriculum*. Hobart, TAS: M. G. Watt.
- Wilson, B. (2014). *A Share in the Future: Review of Indigenous Education in the Northern Territory*. Melbourne, VIC: The Education Business.